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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,521

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Michael Billeci

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8302

7590

07/31/2006

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EXAMINER

CHOI, WOO H

ART UNIT

PAPER NUMBER

2189

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/820,521	Applicant(s) BILLECI, MICHAEL	
	Examiner Woo H. Choi	Art Unit 2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 13-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 – 12, drawn to a system for protecting a hardware update to a register from a software update by limiting software operation, classified in class 711, subclass 163.
 - II. Claims 13 – 19, drawn to a method of conditionally processing a write operation if a bit read hasn't been modified, classified in class 711, subclass 155.
2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as for verifying that no other entity has modified the data being processed in a read-write-modify process. Subcombination II is not required to practice the invention of subcombination I and vice versa. See MPEP § 806.05(d).
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Sean Sullivan on July 25, 2006, a provisional election was made without traverse to prosecute the invention of I, claims 1 – 12. Affirmation of

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this election must be made by applicant in replying to this Office action. Claims 13 – 19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 4, 6 – 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucek et al. (US Patent No. 3,905,024, hereinafter “Boucek”).

7. With respect to claims 1, 7 – 9, Boucek discloses a computer system (figure 1) for controlling asynchronous updates to a storage location (col. 3, lines 59 – 60), the system comprising:

a generally accessible register that is asynchronously updateable by hardware and software; and

protection logic in communication with the register, wherein the protection logic includes circuitry to prevent a hardware update to the register from being overwritten by a software update.

8. With respect to claims 2 and 3, the register includes a plurality of bits and the protection logic is in communication with one or more of the bits (figure 4, clock circuits are in communication with the bits).

9. With respect to claims 4 and 6, the hardware update occurs after the read portion of the read-modify-write instruction and before the write portion of the read-modify-write instruction (figure 4 and col. 3, lines 3 – 7).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boucek in view of Soulanille et al. (US Patent Application Publication No. 2005/0289120, hereinafter “Soulanille”).

Boucek discloses all of the limitations of the parent claim as discussed above. However, Boucek does not specifically disclose that the computer system is a server. On the other hand, Soulanille discloses a client/server architecture (paragraph 34). It would have been obvious to one of ordinary skill in the art, having the teachings of Boucek and Soulanille before him at the time the invention was made, to use Soulanille's client/server architecture teachings in the computer system of Boucek to be able to be able to share resources (paragraph 34).

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boucek in view of Webb et al. (US Patent No. 5,802,359, hereinafter "Webb").

Boucek discloses all of the limitations of the parent claim as discussed above. However, Boucek does not specifically disclose that the software is millicode. On the other hand, Webb discloses millicode implemented read-write-modify software (col. 9, lines 19 – 23). It would have been obvious to one of ordinary skill in the art, having the teachings of Boucek and Webb before him at the time the invention was made, to use Webb's millicode teachings in the computer system of Boucek to be able to implement all processor functions with access to the processor state provided by a set of a few, simple, general instructions (col. 1, lines 19 – 22).

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boucek in view of Sato (US Patent Application Publication No. 2002/0051122).

Boucek discloses all of the limitations of the parent claim as discussed above. However, Boucek does not specifically disclose that the register is a log-trace control register. On the other hand, Sato discloses a log-trace control register accessible by an external hardware as well as

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internal software (paragraph 93). It would have been obvious to one of ordinary skill in the art, having the teachings of Boucek and Sato before him at the time the invention was made, to use Sato's trace logging teachings in the computer system of Boucek to be perform detailed debugging while reducing trace data amount (Sato, paragraphs 7 and 8).

Allowable Subject Matter

14. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (571) 272-4179. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Woo H. Choi
July 25, 2006